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1 PATENT ABSTRACTS OF JAPAN

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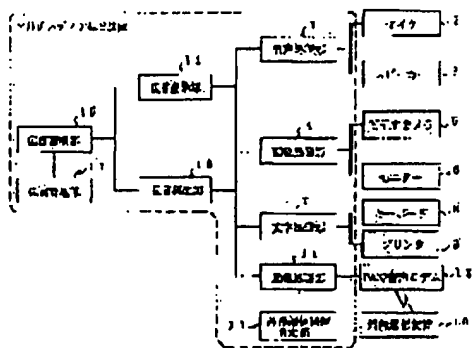
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(54) MULTIMEDIA MESSAGE EQUIPMENT

PROBLEM TO BE SOLVED: To obtain the multimedia message equipment by which a multimedia message is sent to an external communication equipment and received from the external communication equipment independently of a kind of the external communication equipment such as a telephone set, a facsimile equipment and a personal computer through the simple equipment configuration of not needing a very complicated equipment for media conversion.

equipment 10 among message data of each data type stored in the message storage section 14 corresponding to each message and sent to the external communication equipment 10 by using the communication voice type.



[Detailed Description of the Invention]

[Field of the Invention] This invention relates to the multimedia message equipment which can transmit a multimedia message to various kinds of external communication devices, such as a telephone, a personal computer, and facsimile, or can be received from various kinds of external communication devices in detail about the multimedia message equipment which performs registration and playback of a multimedia message which consists of voice, a still picture, an alphabetic character, etc.

[Description of the Prior Art] the block diagram of the conventional multimedia message equipment with which drawing 18 was shown in JP,6-62337,A -- it is -- drawing -- setting -- 2 -- for a monitor and 101, as for the image voice record playback section and 103, a CCD camera and 102 are [a microphone and 3 / a loudspeaker and 6 / a frame memory and 104] the voice records IC. This multimedia message equipment prepares each above-mentioned part in a television set, and is constituted, a message person can record a message with a still picture and voice by easy actuation, and the person sent a message can

check the contents of a message with the still picture and voice by playback of a television set.

[0003] Next, actuation is explained. First, the actuation at the time of creating a message is explained. The sound signal from a microphone 2 and the video signal from CCD camera 101 pass along the image voice record playback section 102, and are recorded on the voice record IC 104 and a frame memory 103, respectively. A frame memory 103 can photo the image of two or more sheets at the time of those with two or more sheets, and a message.

[0004] Next, the actuation at the time of reproducing a message is explained. At the time of playback, the image voice record playback section 102 displays the image on a frame memory 103 on the monitor 6 of a television set, and outputs voice to a loudspeaker 3.

[0005] Drawing 19 is the block diagram of the equipment which has the function of the conventional multimedia message equipment shown in JP,63-86655,A, and is set to drawing. Moreover, 110 A voice recognition unit, a character reader, image-measuring equipment, image recognition equipment, a voice synthesizer, an image synthesizer unit, and a graphic form synthesizer unit, The media conversion section which consists of two or more kinds of equipments, such as compression elongation equipment of various data, The external communication device whose 10 is communications-partner terminals, such as a telephone, facsimile, and a workstation, The communication device with which 111 performs an information communication link among the various external communication devices 10, The local station media discernment section which detects the informational input media by which a communication link is presented with 112, The media selection-control section which carries out media conversion of 113 with reference to the media conversion table 115, using the media conversion section 110 alternatively, and 114 The distant-office media discernment section which detects the media (communication medium) which can process the external communication device 10, and communicates the above-mentioned information, The media conversion table on which, as for 115, the classification of correspondence of input media and a communication medium to media conversion was described, and 116 are the self-media functional tables on which the media conversion function which equipment has was described.

[0006] Next, actuation is explained. The actuation at the time of transmitting in this equipment is explained. First, the input media of input which transmit are detected in the local station media discernment section 112. To coincidence, the media (communication medium) which can process the external communication device 10 are detected in the distant-office media discernment section 114. Next, the media selection-control section 113 asks for the classification of the media conversion which should be used from the media conversion table 115. And with reference to the classification of the above-mentioned media conversion, and the self-media functional table 116, the media conversion section 110 is started alternatively, media conversion of said input is carried out, and the data obtained as a result of media conversion are transmitted to the external communication device 10 using a communication device 111.

[0007]

[Problem(s) to be Solved by the Invention] Although it was possible in the 1st conventional example to perform the multimedia message using a still picture and voice since conventional multimedia message equipment was constituted as mentioned above, a function was restricted, for example to registration and playback of the multimedia message by the direct control of multimedia message equipments, such as a television set, and the technical problem which transmits a multimedia message outside, can be reproduced or cannot register a multimedia message from the exterior outside occurred.

[0008] Moreover, although it is possible to receive a multimedia message outside using familiar external communication devices, such as a telephone and facsimile, and to check the contents of the message in the 2nd conventional example Since it corresponded to various external communication devices, recognition processing was carried out [voice / input], and technical problems, such as needing the very complicated equipment configuration for media conversion which changes into a character code train, or carries out speech synthesis processing of the character code train, and generates synthesized speech, occurred.

[0009] It aims at obtaining the multimedia message equipment which it was not made in order that this invention might solve the above technical problems, and the class of external communication devices, such as a telephone, facsimile, and a personal computer, is not asked, but a multimedia message is transmitted to an external communication device by the brief equipment configuration which does not need the very complicated equipment for media conversion, and can be received from an external communication device.

[0010]

[Means for Solving the Problem] The multimedia message equipment concerning invention according to claim 1 The message registration section which performs registration processing of the message data of each data kind which constitutes a message, The class of external communication device used as the message are recording section which stores the message data of each data kind registered, and the transmission place of a message is judged. An external communication device judging means to determine the communication link voice kind which determines whether the commo data kind which can process the external communication device is which data kind, and uses it for the communication link with the external communication device, The message playback section which picks out said determined commo data kind of message data from the message data of each data kind accumulated in said message are recording section corresponding to said message at the time of transmission of a message, It has a communications processing means to transmit said determined commo data kind which was taken out by said message playback section of message data to said external communication device with said determined communication link voice kind.

[0011] The multimedia message equipment concerning invention according to claim 2 An external communication device judging means to determine the communication link voice kind which judges the class of external communication device which serves as a transceiver partner of a message, determines whether

the commo data kind which can process the external communication device is which data kind, and uses it for the communication link with the external communication device, The message registration section which performs registration processing of the message data of each data kind which constitutes the message of the message received by communication link, At the time of the message are recording section which stores the message data of each data kind registered, and transmission of a message From the message data of each data kind accumulated in said message are recording section corresponding to said message, at the time of the message playback section which takes out said determined commo data kind of message data, and transmission of a message Said determined commo data kind which was taken out by said message playback section of message data are transmitted to said external communication device with said determined communication link voice kind. At the time of reception of a message It has a communications processing means by which said determined communication link voice kind receives message data from said external communication device.

[0012] The multimedia message equipment concerning invention according to claim 3 establishes voice, a still picture, and three data kinds of an alphabetic character as a data kind which constitutes a message.

[0013] The multimedia message equipment concerning invention according to claim 4 A data kind inputs audio message data from voice input means, such as a microphone, at the time of registration of the message by the direct control of equipment. The speech processing section in which a data kind outputs audio message data from voice output means, such as a loudspeaker, at the time of playback of the message by the direct control of equipment, A data kind inputs the message data of a still picture from still picture input means, such as a video camera, at the time of registration of the message by the direct control of equipment. The image-processing section in which a data kind outputs the message data of a still picture from still picture output means, such as a monitor, at the time of playback of the message by the direct control of equipment, A data kind inputs the message data of an alphabetic character from alphabetic character input means, such as a keyboard, at the time of registration of the message by the direct control of equipment, and a data kind is equipped with the character-manipulation section which outputs the message data of an alphabetic character from alphabetic character output means, such as a printer, at the time of playback of the message by the direct control of equipment.

[0014] The multimedia message equipment concerning invention according to claim 5 will have the date appointed Management Department carry out the message as it is refreshable, if a message person wishes at the time of message registration, and a message person will be made to input the date time of day which makes a message refreshable, the date assignment registration section registered as date time information and the date time information of the registered message will be managed and it will become to the registered date time of day.

[0015] If a message person wishes at the time of message registration, the multimedia message equipment concerning invention according to claim 6

manages said destination information registered with the destination assignment registration section which make input the destination information on the message including the class of external communication device of the transmission place of a message into a message person, and registers said destination information, and will have the destination message Management Department direct transmission by said transmission place of the message into which said destination information was registered.

[0016] If the multimedia message equipment concerning invention according to claim 7 makes the time which transmits a message input into a message person further and becomes said time at the time of the input of destination information, the message into which said destination information was registered will be transmitted.

[0017]

[Embodiment of the Invention] Hereafter, one gestalt of implementation of this invention is explained.

Gestalt 1. drawing 1 of operation is the block diagram of the multimedia message equipment by the gestalt 1 of implementation of this invention, and is set to drawing. 1 is the speech processing section and a microphone (voice input means) 2 and a loudspeaker (voice output means) 3 are connected. The voice input from a microphone 2 is changed into the voice data of for example, WAV form, it outputs to the message registration section 14, the voice data of for example, WAV form inputted from the message playback section 16 is changed into a sound signal, and it outputs to a loudspeaker 3.

[0018] 4 is the image-processing section, a video camera (still picture input means) 5 and a monitor (still picture output means) 6 are connected, and it captures the input image from a video camera 5, for example, changes it into the still picture data of BMP form, is outputted to the message registration section 14, changes into a quiescence picture signal the still picture data of for example, BMP form inputted from the message playback section 16, and outputs them to a monitor 6.

[0019] 7 is the character-manipulation section, a keyboard (alphabetic character input means) 8 and a printer (alphabetic character output means) 9 are connected, and it changes into the alphabetic data of for example, Shift JIS form the key input inputted from the keyboard 8, is outputted to the message registration section 14, changes into a printer signal the alphabetic data of for example, Shift JIS form inputted from the message playback section 16, and outputs it to a printer 9.

[0020] 10 is external communication devices, such as a telephone which receives and reproduces the message transmitted from this multimedia message equipment, or transmits and registers a message at this multimedia message equipment, facsimile, and a personal computer. 11 is the communications processing section (an external communication device judging means, communications processing means) which transmits and receives message data among the external communication devices 10, such as a telephone, facsimile, and a personal computer, using FAX / voice modem 12, and also performs conversion of the message data type type according to the class of external

communication device 10. 12 changes into each communication link voice kind of voice, a facsimile transmitting sound, or a modem transmitting sound the digital data outputted from the communications processing section 11, and performs transmission in the telephone as an external communication device 10, facsimile, or a personal computer. Moreover, they are FAX / voice modem (an external communication device judging means, communications processing means) which changes each communication link voice kind of voice, a facsimile night message sound, or a modem night message sound into digital data conversely, and performs telephone as an external communication device 10, facsimile, or reception from a personal computer. 13 is the external communication device judging section (external communication device judging means), judges the class of external communication device 10, and determines the commo data kind which can process the external communication device 10 by this, and the communication link voice kind used for the communication link with the external communication device 10.

[0021] 14 is the message registration section, it controls the speech processing section 1, the image-processing section 4, the character-manipulation section 7, and the communications processing section 11, inputs a message, and saves the inputted message data in the message are recording section 15 so that the message which a user becomes from the combination of the arbitration of voice, a still picture, and an alphabetic character can be registered. The message are recording section 15 stores the message data of voice, a still picture, and each data kind of an alphabetic character. 16 is the message playback section, takes out the message data of each data kind accumulated in the message are recording section 15 on the occasion of a message playback demand of a user, and outputs them to the speech processing section 1, the image-processing section 4, the character-manipulation section 7, or the communications processing section 11. 17 is the message Management Department, has the message managed table for message management, and adds message information to a message managed table in the case of preservation of the message data to the message are recording section 15 by the message registration section 14.

[0022] Drawing 2 is front drawing showing an example of the message managed table used in the gestalt 1 of this operation. The information on the message of each data kind to every message is recorded on a message managed table. The multimedia message equipment of the gestalt 1 of this operation assumes voice, the still picture, and the alphabetic character as a data kind, voice data is saved in the message are recording section 15 as a file of for example, WAV form, still picture data are saved in the message are recording section 15 as a file of for example, BMP form, and alphabetic data is saved in the message are recording section 15 as a file of for example, Shift JIS form. When the data name accumulated into the message are recording section 15 is indicated by it when the data kind of a message exists in each item of a message managed table, and it does not exist in it, it considers as a blank.

[0023] Drawing 3 is front drawing showing correspondence with the external communication device 10, and the communication link voice kind and commo

data kind at the time of determining a communication link voice kind and a comomo data kind in the external communication device judging section 13. When the external communication device 10 is a telephone, voice and a comomo data kind are determined for a communication link voice kind as voice, when the external communication device 10 is facsimile, as for a communication link voice kind, a still picture and an alphabetic character are determined, as for a facsimile transmitting sound and a comomo data kind, and when the external communication device 10 is a personal computer, as for a communication link voice kind, voice, a still picture, and an alphabetic character are determined, as for a modem transmitting sound and a comomo data kind.

[0024] Next, actuation is explained. Drawing 4 is a flow chart which shows the flow of processing of the multimedia message equipment by the gestalt 1 of implementation of this invention. First, in a step ST 1, when it judges whether there is any communication link demand from the external communication device 10, such as getting a telephone call from the exterior, and there is a communication link demand, in a step ST 2, transceiver processing with the external communication device 10 by communications processing section 11 grade is performed.

[0025] When there is no communication link demand, in a step ST 3, the existence of the demand from the user who twists and does the direct control of the multimedia message equipment to a communication link is judged. When there is no demand from a user, processing is returned to a step ST 1.

[0026] When there is a demand from the user who does the direct control of the multimedia message equipment, in a step ST 4, it judges first whether the demand from a user is a message registration demand. In being a message registration demand, in a step ST 5, the message registration section 14 performs message registration processing.

[0027] In not being a message registration demand, in a step ST 6, it judges whether the demand from a user is a message playback demand. In being a message playback demand, in a step ST 7, the message playback section 16 performs message regeneration. In not being demand [which], either, it returns processing to a step ST 1.

[0028] Drawing 5 is a flow chart which shows the flow of processing of message registration processing of the step ST 5 in drawing 4. First, in a step ST 10, the alternative for selection of which data kind [voice, a still picture, and] of an alphabetic character to input is displayed. When it carries out also here and there is a data kind [finishing / an input], the display of a data kind [finishing / an input] is not made. Next, a user is made to choose the data kind inputted [from] among voice, a still picture, and an alphabetic character in a step ST 11.

[0029] When a user's selection is voice input, in a step ST 12, the speech processing section 1 inputs voice from a microphone 2, for example, it changes into the data of WAV form, and outputs to the message registration section 14, and the message registration section 14 saves the voice data of this WAV form in the message are recording section 15. When a user's selection is a still picture input, in a step ST 13, the image-processing section 4 captures the input image from a video camera 5, for example, it changes into the still picture data of BMP

form, and outputs to the message registration section 14, and the message registration section 14 saves the still picture data of this BMP form in the message are recording section 15. When a user's selection is an alphabetic character input, in a step ST 14, the character-manipulation section 7 keys the alphabetic character from a keyboard 8, this is changed into the alphabetic data of for example, Shift JIS form, it outputs to the message registration section 14, and the message registration section 14 saves the alphabetic data of this Shift JIS form in the message are recording section 15.

[0030] At a step ST 15, when a user is made to choose whether the message of the data kind of further others is inputted and the further input is chosen in it, the data kind which returns processing to a step ST 10 and is inputted into a user at a degree is made to choose, and the same processing as the following is performed. When the further input is not chosen in a step ST 15, processing is moved to the following step ST 16. In addition, if the input of all data kinds is completed, processing will be automatically moved to the following step ST 16.

[0031] A user is made to choose whether a message is registered in a step ST 16. When registration of a message is chosen, in a step ST 17, the message information on this message is added in the message managed table of the message Management Department 17, and this message becomes effective. When registration of a message is not chosen, in a step ST 18, the message data of each form saved in the message are recording section 15 this time are eliminated. Registration of the message data based on the data kind corresponding to a user's hope as mentioned above is performed.

[0032] In message regeneration [in / on the other hand / the step ST 7 of drawing 4] After making the message reproduced to a user choose, the message playback section 16 takes out the message data of each data kind which exists corresponding to the message from the message are recording section 15 with reference to the message managed table of the message Management Department 17. According to whether the data kind of message data is voice, it is a still picture, or it is an alphabetic character, it outputs to the speech processing section 1, the image-processing section 4, or the character-manipulation section 7. If message data are inputted into the speech processing section 1, the speech processing section 1 will change the inputted voice data of for example, WAV form into a sound signal, and will output it to a loudspeaker 3. If message data are inputted into the image-processing section 4, the image-processing section 4 will change the inputted still picture data of for example, BMP form into a quiescence picture signal, and will output them to a monitor 6. If message data are inputted into the character-manipulation section 7, the character-manipulation section 7 will change the inputted alphabetic data of for example, Shift JIS form into a printer signal, and will output it to a printer 9. The message which the user chose is reproduced by the above as the same voice as the data kind at the time of the registration, a still picture, and an alphabetic character.

[0033] Drawing 6 is a flow chart which shows the flow [communication device / of a step ST 2 / external] of processing of transceiver processing in drawing 4 . In transceiver processing with an external communication device, the decision of

the judgment of the class of external communication device 10 by the external communication device judging means of external communication device judging section 13 grade, a communication link voice kind, and a comomo data kind is first made in a step ST 20.

[0034] The judgment of the class of external communication device 10 can be performed by [as being the following]. First, if the call sound of the telephone from the external communication device 10 sounds the regular number of times FAX / voice modem 12 set to the telephone transceiver condition by the control signal from the communications processing section 11 receive a telephone automatically. The direction where the direction which registers a message by telephone reproduces a message by telephone No. 1 "No. 2 those where the direction where the direction which registers a message by facsimile reproduces a message for No. 3 by facsimile registers a message for No. 4 with a personal computer reproduces a message for No. 5 with a personal computer need to push No. 6. Messages, such as ", are passed. The carbon button of No. 5 or No. 6 of telephone to which the carbon button of No. 3 or No. 4 of telephone to which this is answered, and the user of the external communication device 10 pushes the carbon button of No. 1 or No. 2 of the telephone as an external communication device 10, or the facsimile as an external communication device 10 is connected is pushed, or the personal computer as an external communication device 10 is connected is pushed. FAX / voice modem 12 outputs the signal corresponding to this push signal to the communications processing section 11, the communications processing section 11 outputs the signal corresponding to this to the external communication device judging section 13, and, thereby, the external communication device judging section 13 distinguishes the class of external communication device 10.

[0035] next, when the class of external communication device 10 is a telephone, the external communication device judging section 13 Determine that a communication link voice kind is voice in a step ST 21, and a comomo data kind is voice, and when the class of external communication device 10 is facsimile Determine that a communication link voice kind is a facsimile transmitting sound in a step ST 22, and comomo data kinds are a still picture and an alphabetic character, and when the class of external communication device 10 is a personal computer It is determined that a communication link voice kind is a modem transmitting sound in a step ST 23, and comomo data kinds are voice, a still picture, and an alphabetic character.

[0036] Next, when the numbers which the user pushed in a step ST 20 are 1, 3, and 5 (i.e., when a demand of a user is registration of a message), processing is advanced to 30 or less step [ST] reception, and when the numbers which the user pushed in a step ST 20 are 2, 4, and 6 (i.e., when a demand of a user is playback of a message), processing is advanced to 24 or less step [ST] transmitting processing.

[0037] In 24 or less step [ST] transmitting processing, in a step ST 24, selection of the message which transmits from a user is received first, and the message data of the comomo data kind which the message playback section 16 determined in said steps ST21-ST23 are taken out out of the message data of each data kind

accumulated in the message are recording section 15 corresponding to this message. Selection of the invalid message to which effective / invalid item in a message managed table serve as an invalid here, and the message in which the message data of a commo data kind do not exist cannot be performed.

[0038] Next, in a step ST 25, if the communication link voice kind which progressed to a step ST 27 and was determined as it when the communication link voice kind which progressed to a step ST 26 and was determined as it when the determined communication link voice kind was voice was a facsimile transmitting sound is a modem transmitting sound, it will progress to a step ST 28.

[0039] And in a step ST 26, voice data is transmitted with voice, in a step ST 27, still picture data and alphabetic data are transmitted with a facsimile transmitting sound, and voice data, still picture data, and alphabetic data are transmitted with a modem transmitting sound in a step ST 28.

[0040] Drawing 7 is front drawing showing the form in each part of the various message data in the multimedia message equipment by the gestalt 1 of this operation. As shown in drawing 7, when the external communication device 10 is a telephone (a communication link voice kind is voice) The voice data accumulated in the message are recording section 15 as a voice file of for example, WAV form is taken out by the message playback section 16. After being changed into the digital data FAX / for voice modem 12 which expresses transmitting voice in the communications processing section 11, it is changed into playback voice in FAX / voice modem 12, and is transmitted to the telephone as an external communication device 10 through the telephone line etc. (step ST 26).

[0041] When the external communication device 10 is facsimile (a communication link voice kind is a facsimile transmitting sound) The still picture data stored in the message are recording section 15 as a still picture file of for example, BMP form are taken out by the message playback section 16. After being changed into the digital data FAX / for voice modem 12 which expresses facsimile data in the communications processing section 11, It is changed into the facsimile transmitting sound of the protocol of facsimile in FAX / voice modem 12, and is transmitted to the facsimile as an external communication device 10 through the telephone line. Moreover, it is also possible to transmit the alphabetic data accumulated in the message are recording section 15 to the facsimile as an external communication device 10 at the time of transmission. The alphabetic data accumulated in the message are recording section 15 as an alphabetic file of for example, Shift JIS form is taken out by the message playback section 16. Once it was changed into the still picture data of BMP form in the communications processing section 11, for example, after being changed into the digital data showing facsimile data FAX / for voice modem 12, It is changed into the facsimile transmitting sound of the protocol of facsimile in FAX / voice modem 12, and is transmitted to the facsimile as an external communication device 10 through the telephone line etc. (step ST 27).

[0042] When the external communication device 10 is a personal computer (a communication link voice kind is a modem transmitting sound) In the message

are recording section 15, for example, the voice data accumulated as a voice file of WAV form, For example, the still picture data stored as a still picture file of BMP form, For example, the alphabetic data accumulated as an alphabetic file of Shift JIS form is taken out by the message playback section 16. After being changed into the digital data FAX / for voice modem 12 in the communications processing section 11, it is changed into the modem transmitting sound of the protocol of a modem in FAX / voice modem 12, and is transmitted to the personal computer as an external communication device 10 through the telephone line etc. (step ST 28). Transmission of message data corresponding to the class of external communication device 10 as mentioned above is performed.

[0043] On the other hand, if the communication link voice kind which progressed to a step ST 32 and was determined as it when the communication link voice kind which progressed to a step ST 31 and was determined as it when the communication link voice kind first determined in a step ST 30 in reception was voice was a facsimile transmitting sound is a modem transmitting sound, it will progress to a step ST 33. And voice is received, transmission of a message is required of a user in a step ST 32, a facsimile transmitting sound is received, transmission of a message is required [in a step ST 31 transmission of a message is required of a user,] of a user in a step ST 33, and a modem transmitting sound is received.

[0044] By next, conversion contrary to the conversion at the time of the transmission explained in a step ST 34 using drawing 7 The voice which received in a step ST 31 is saved in the message are recording section 15 as a voice file of for example, WAV form. Or the facsimile transmitting sound received in a step ST 32 is saved in the message are recording section 15 as a still picture file of for example, BMP form. Or the modem transmitting sound received in a step ST 33 is saved in the message are recording section 15 as the voice file of WAV form, the still picture file of BMP form, or an alphabetic file of Shift JIS form. In addition, although the commo data kind received from the personal computer as an external communication device 10 serves as voice, a still picture, a three kinds of inside alphabetic character, or combination when a communication link voice kind is a modem transmitting sound, a commo data kind is automatically distinguished from the contents of data, and preservation as the voice file according to a commo data kind, a still picture file, or an alphabetic file is performed by performing the above-mentioned conversion according to this.

[0045] Finally, in a step ST 35, the message information on this message is added by the message Management Department 17 in a message managed table. Various kinds of reception and preservation of each commo data kind from the external communication device 10 of message data are performed as mentioned above.

[0046] As mentioned above, according to the gestalt 1 of this operation, the message data of the voice accumulated in the message are recording section 15 corresponding to each message, a still picture, and each data kind of an alphabetic character are managed using the above message managed tables. The commo data kind and communication link voice kind with the external communication device 10 which responded to judge the class of external

communication device 10 in the case of a communication link are determined. Take out said determined commo data kind of message data out of the message data of each data kind accumulated in the message are recording section 15 in transmission of a message, and it transmits to the external communication device 10 with said determined communication link voice kind. Since it is considering as the configuration which receives message data from the external communication device 10 with said determined communication link voice kind in reception of a message, and is accumulated in the message are recording section 15, Since it corresponds to various external communication devices, such as a telephone, facsimile, and a personal computer, carry out [voice] recognition processing, and it does not need to use the very complicated equipment for the data kind (media) conversion which changes into a character code train, or carries out speech synthesis processing of the character code train, and generates synthesized speech. Can consider as the multimedia message equipment which a multimedia message is transmitted to various external communication devices regardless of the class of external communication device by the brief equipment configuration, and can be received from an external communication device, therefore it sets outside. It can make it possible to reproduce a multimedia message using the familiar external communication devices 10, such as a telephone, facsimile, and a personal computer, to check the contents of the message or to register a multimedia message from the exterior.

[0047] moreover, the image-processing section 4 in which the data kind by the speech processing section 1, the video camera 5, and monitor 6 by which a data kind with a microphone 2 and a loudspeaker 3 outputs and inputs audio message data outputs and inputs the message data of a still picture -- and Since the data kind by the keyboard 8 and the printer 9 is considering as the configuration equipped with the character-manipulation section 7 which outputs and inputs the message data of an alphabetic character, The multimedia message which consists of voice, a still picture, and an alphabetic character by the direct control of equipment besides a communication link can be used as the multimedia message equipment which can be registered and reproduced.

[0048] In addition, in the above, although the multimedia message equipment in which registration and playbacks of the message by communication link, and all registration and playbacks of the message by the direct control of equipment are possible was shown For example, the configuration which does not perform registration and playback of the message by the direct control of equipment, but performs registration and playback of a message only by communication link, In a communication link, a message is not received but it becomes it can be good also as a configuration of only transmitting to various kinds of external communication devices, and reproducible in transmission to the exterior of the multimedia message impossible also in this case conventionally, or the exterior.

[0049] Moreover, although the example which established voice, a still picture, and three data kinds of an alphabetic character was shown as a data kind which constitutes a message in the above, when two data kinds, voice, a still picture, etc., constitute a message, for example, for example, also when adding other

data kinds, such as an animation, to the component of a message, it cannot be overemphasized that this invention can be applied.

[0050] Moreover, in the above, although the voice data accumulated in the message are recording section 15, still picture data, and alphabetic data were explained as for example, WAV form, BMP form, and a Shift JIS form, these data type types are examples and it cannot be overemphasized that voice data, still picture data, and alphabetic data may be accumulated in other form.

[0051] Moreover, it cannot be overemphasized that it can apply not only when multimedia message equipment and the external communication device 10 are connected by the telephone line and it transmits and receives this invention through the telephone line, but when transmitting and receiving by wireless.

[0052] Gestalt 2. drawing 8 of operation is the block diagram of the multimedia message equipment by the gestalt 2 of implementation of this invention, in drawing, 30 makes a message person input the date time of day which confirms a message at the time of message registration, and it is the date assignment registration section which performs processing which registers as date time information, and it is prepared along with the message registration section 14. The message into which date time information was inputted is first made into an invalid, and becomes effective in the specified date time of day. If the date time information of the registered message is managed and the registered date time of day comes, 31 is the date appointed Management Department which confirms the message, and is prepared along with the message Management Department 17. In addition, the same sign is attached about a part the same as that of the part shown in drawing 1, or considerable, and duplication explanation is omitted.

[0053] Drawing 9 is front drawing showing an example of the message managed table used in the gestalt 2 of this operation. The information on the message of each data kind to every message is recorded on a message managed table. When the data name accumulated into the message are recording section 15 is indicated by it when the data kind of a message exists in each item, and it does not exist in it, it considers as a blank. Moreover, if the column of effective/invalid in this message managed table becomes the specified date time of day, it will be effectively rewritten by the date appointed Management Department 31 from an invalid.

[0054] Drawing 10 is front drawing showing an example of a date time-of-day information management table when the message managed table of drawing 9 is used. The date and time of day which confirm a message are described for every identification number of a message by this date time-of-day information management table.

[0055] Next, actuation is explained. Drawing 11 is a flow chart which shows the flow of processing of the multimedia message equipment of the gestalt 2 of this operation. In drawing 11, processing of a step ST 1 - a step ST 7 is the same as the processing shown in drawing 4 in the gestalt 1 of operation, and omits duplication explanation. first, when it is judged whether current time amount is carrying out fixed time amount progress from the last check time amount and it is carrying out fixed time amount progress in a step ST 40 In a step ST 41, the date appointed Management Department 31 checks date time information in a date

time-of-day information management table, and if there is a message which newly passed date time of day, effective / invalid item of this message on a message managed table will be confirmed. This message becomes selectable in case this receives selection of the message which reproduces or transmits from a user.

[0056] A user is made to choose whether date assignment is performed in a step ST 42. When the selection which performs date assignment is made, in a step ST 43, processing of registration of the date time information by the date assignment registration section 30 is performed. In addition, it may be made to perform processing of date assignment of a step ST 42 and a step ST 43 after the message registration by the communication link which multimedia message equipment was performed after the message registration by the user who does a direct control as shown here, and also was shown in drawing 6 in the gestalt 1 of operation.

[0057] Drawing 12 is a flow chart which shows the flow of processing of registration of the date time information by the date assignment registration section 30 of the step ST 43 of drawing 11. The date assignment registration section 30 adds the date time information which received first the input of the date and time of day which confirm a message from the user in a step ST 45, next was inputted at said step ST 45 in a step ST 46 to a date time-of-day information management table.

[0058] Drawing 13 is a flow chart which shows the flow of processing of a check of the date time information of the step ST 41 of drawing 11. First, i is set to 1 in a step ST 50. And in a step ST 51, it judges whether the i-th date time information is shown in a date time-of-day information management table. Processing is ended when there is no date time information to the i-th.

[0059] When there is the i-th date time information, in a step ST 52, it judges whether it has passed over the appointed time of day of the i-th date time information. When having not passed over the appointed time of day, in a step ST 55, 1 is added to i for the check of the following date time information, and processing is returned to a step ST 51.

[0060] When having passed over the appointed time of day, in a step ST 53, effective / invalid item in the message managed table with the same message identification number as the i-th date time information of a message are confirmed, and the i-th date time information of a date time-of-day information management table is deleted in a step ST 54. Then, in a step ST 55, 1 is added to i for the check of the following date time information, and processing is returned to a step ST 51.

[0061] As mentioned above, since it enabled it to specify [according to the gestalt 2 of this operation] the date time of day which forms the date assignment registration section 30 and the date appointed Management Department 31, and confirms a message in addition to the configuration of the gestalt 1 of said operation, When a message person inputs the date time of day which confirms a message in addition to the effectiveness of the gestalt 1 of said operation, it prevents from choosing playback of the message till the date time of day. The date time of day can be expected, a message can be made refreshable, and it

can consider as the multimedia message equipment which can process the multimedia message which specified the date time of day which becomes refreshable.

[0062] Gestalt 3. drawing 14 of operation is the block diagram of the multimedia message equipment by the gestalt 3 of implementation of this invention, in drawing, it is the destination assignment registration section which performs input of the destination information which contains the class of external communication device 10 of the transmission place of a message, and the telephone number of a transmission place at the time of message registration, and processing of registration, and 40 is prepared along with the message registration section 14. 41 is the destination message Management Department which directs the transmission with destination information of a message, and is prepared along with the message Management Department 17. In addition, the same sign is attached about a part the same as that of the part shown in drawing 1, or considerable, and duplication explanation is omitted.

[0063] Next, actuation is explained. Drawing 15 is a flow chart which shows the flow of processing of the multimedia message equipment of the gestalt 3 of this operation. In drawing 15, processing of a step ST 1 - a step ST 7 is the same as the processing shown in drawing 4 in the gestalt 1 of operation, and omits duplication explanation. It is made to choose in a step ST 60 whether destination assignment of the message registered into the user is carried out. When a user chooses destination assignment, in a step ST 61, destination assignment transmitting processing in which it explains below is performed. In addition, it may be made to perform destination assignment transmitting processing of a step ST 60 and a step ST 61 after the message registration by the communication link which multimedia message equipment was performed after the message registration by the user who does a direct control as shown here, and also was shown in drawing 6 in the gestalt 1 of operation.

[0064] Drawing 16 is a flow chart which shows the flow of processing of destination assignment transmitting processing of the step ST 61 in drawing 15. First, the destination assignment registration section 40 makes the selection input of the class of transmission place equipment, and the input of the transmission place telephone number give a message person (step ST 62), and adds the above-mentioned destination information to the destination control table of the destination message Management Department 41 (step ST 63). Drawing 17 is front drawing showing an example of the destination control table used in the gestalt 3 of this operation. Destination information, such as an identification number of the message which was common in the identification number of the message described by the message managed table, and a class of transmission place equipment, the transmission place telephone number, is described by the destination control table.

[0065] Next, the message on a destination control table is transmitted to the external communication device 10 with reference to a message managed table with directions of the destination message Management Department 41. In this case, after connecting with various kinds of external communication devices 10, the message data of each commo data kind saved in the message are recording

section 15 like the processing at the time of the transmission shown in the gestalt 1 of operation are changed into the communication link voice kind of various kinds of external communication devices 10, and it transmits (step ST 64). Here, about the message which cannot transmit by during the conversation etc., transmission/standby item of a destination control table is considered as standby, and transmission is again performed after predetermined time amount. Then, the destination information on a transmitted message is deleted from a destination control table (step ST 65).

[0066] As mentioned above, in addition to the configuration of the gestalt 1 of said operation, the destination assignment registration section 40 and the destination message Management Department 41 form, and since it enabled it to transmit the message as which the destination was specified, according to the gestalt 3 of this operation, in addition to the effectiveness of the gestalt 1 of said operation, a multimedia message can use as the multimedia message equipment which can be transmit directly corresponding to the class of that external communication device by a message person hope at a specific partner.

[0067] In addition, although the transmission place telephone number was made to input in case a message person was made to input the destination in the above, two or more classes and telephone numbers of an external communication device of a transmission place are registered for example beforehand, and it chooses from them, and a message person is possible also for the approach of specifying the destination, and can acquire the same effectiveness.

[0068] Although the message by which destination assignment was carried out was immediately transmitted in destination assignment transmitting processing of the gestalt 3 of the gestalt 4. above-mentioned implementation of operation when destination assignment was performed at the time of message registration In destination assignment transmitting processing, while specifying the destination, transmitting time is specified. It can also use to be made to transmit that message to the specified time as the multimedia message equipment [it is possible and] which can carry out transmission of the message to the specific partner of whom a message person expects in this case In addition to the effectiveness of the gestalt 3 of said operation to the time of hope of a user.

[0069]

[Effect of the Invention] As mentioned above, the message registration section which performs registration processing of the message data of each data kind which constitutes a message according to invention according to claim 1, The class of external communication device used as the message are recording section which stores the message data of each data kind registered, and the transmission place of a message is judged. An external communication device judging means to determine the communication link voice kind which determines whether the commo data kind which can process the external communication device is which data kind, and uses it for the communication link with the external communication device, The message playback section which picks out said determined commo data kind of message data from the message data of each data kind accumulated in said message are recording section corresponding to

said message at the time of transmission of a message, Since it constituted so that it might have a communications processing means to transmit said determined commo data kind which was taken out by said message playback section of message data to said external communication device with said determined communication link voice kind The class of external communication device which serves as a transmission place of a message with an external communication device judging means is judged. The commo data kind which can process the external communication device, and the communication link voice kind which can be used for a communication link are determined. In the case of transmission of a message The message data of the commo data kind which can process said external communication device are alternatively taken out out of the message data of each data kind accumulated in the message are recording section corresponding to the message. It can transmit to said external communication device using the communication link voice kind with which said external communication device can use this for a communication link. It follows. Since it corresponds to various external communication devices, such as a telephone, facsimile, and a personal computer, carry out [voice] recognition processing, and it does not need to use the very complicated equipment for the data kind (media) conversion which changes into a character code train, or carries out speech synthesis processing of the character code train, and generates synthesized speech. Can consider as the multimedia message equipment which can transmit a multimedia message to various external communication devices regardless of the class of external communication device by the brief equipment configuration, and it sets outside. There is effectiveness it is ineffective to it being possible to reproduce a multimedia message using the familiar external communication devices 10, such as a telephone, facsimile, and a personal computer, and to check the contents of the message.

[0070] According to invention according to claim 2, the class of external communication device which serves as a transceiver partner of a message is judged. An external communication device judging means to determine the communication link voice kind which determines whether the commo data kind which can process the external communication device is which data kind, and uses it for the communication link with the external communication device, The message registration section which performs registration processing of the message data of each data kind which constitutes the message of the message received by communication link, At the time of the message are recording section which stores the message data of each data kind registered, and transmission of a message From the message data of each data kind accumulated in said message are recording section corresponding to said message, at the time of the message playback section which takes out said determined commo data kind of message data, and transmission of a message Said determined commo data kind which was taken out by said message playback section of message data are transmitted to said external communication device with said determined communication link voice kind. At the time of reception of a message Since it constituted so that it might have a communications processing means by which said determined communication link voice kind receives message data from said

external communication device The class of external communication device which serves as a transmission-and-reception place of a message with an external communication device judging means is judged. The comomo data kind which can process the external communication device, and the communication link voice kind which can be used for a communication link are determined. In the case of transmission of a message The message data of the comomo data kind which can process said external communication device are alternatively taken out out of the message data of each data kind accumulated in the message are recording section corresponding to the message. It transmits to said external communication device using the communication link voice kind with which said external communication device can use this for a communication link. In the case of reception of a message Said determined communication link voice kind receives message data from an external communication device. Can store the message data of each data kind in the message are recording section, and it follows. Since it corresponds to various external communication devices, such as a telephone, facsimile, and a personal computer, carry out [voice] recognition processing, and it does not need to use the very complicated equipment for the data kind (media) conversion which changes into a character code train, or carries out speech synthesis processing of the character code train, and generates synthesized speech. Can consider as the multimedia message equipment which a multimedia message is transmitted to various external communication devices regardless of the class of external communication device by the brief equipment configuration, and can be received from an external communication device, and it sets outside. There is effectiveness it is ineffective to it being possible to reproduce a multimedia message using the familiar external communication devices 10, such as a telephone, facsimile, and a personal computer, to check the contents of the message or to register a multimedia message from the exterior.

[0071] Since according to invention according to claim 3 it constituted as a data kind which constitutes a message so that voice, a still picture, and three data kinds of an alphabetic character might be established Since it corresponds to various external communication devices, such as a telephone, facsimile, and a personal computer, carry out [voice] recognition processing, and it does not need to use the very complicated equipment for the data kind (media) conversion which changes into a character code train, or carries out speech synthesis processing of the character code train, and generates synthesized speech. There is effectiveness which can be used as the multimedia message equipment which it corresponds to various external communication devices, and can transmit, or transmit and receive appropriately the multimedia message which consists of voice, a still picture, and an alphabetic character regardless of the class of external communication device by the brief equipment configuration.

[0072] According to invention according to claim 4, a data kind inputs audio message data from voice input means, such as a microphone, at the time of registration of the message by the direct control of equipment. The speech processing section in which a data kind outputs audio message data from voice output means, such as a loudspeaker, at the time of playback of the message by

the direct control of equipment, A data kind inputs the message data of a still picture from still picture input means, such as a video camera, at the time of registration of the message by the direct control of equipment. The image-processing section in which a data kind outputs the message data of a still picture from still picture output means, such as a monitor, at the time of playback of the message by the direct control of equipment, A data kind inputs the message data of an alphabetic character from alphabetic character input means, such as a keyboard, at the time of registration of the message by the direct control of equipment. Since it constituted so that it might have the character-manipulation section in which a data kind outputs the message data of an alphabetic character from alphabetic character output means, such as a printer, at the time of playback of the message by the direct control of equipment The multimedia message which consists of voice, a still picture, and an alphabetic character is added to the ability to register and reproduce [playback or] by communication link. Carry out the direct control of the multimedia message which consists of voice, a still picture, and an alphabetic character, and equipment is registered for it by the input from a voice input means, a still picture input means, and an alphabetic character input means. Moreover, there is effectiveness which can be used as the multimedia message equipment which the direct control of the equipment is carried out and can be reproduced with the output from a voice output means, a still picture output means, and an alphabetic character output means.

[0073] The date assignment registration section which according to invention according to claim 5 a message person is made to input the date time of day which will make a message refreshable if a message person wishes at the time of message registration, and registers it as date time information, Since it constituted so that it might have the date appointed Management Department which makes the message refreshable when the date time information of the registered message was managed and the registered date time of day came When a message person inputs date time of day, it prevents from reproducing the message till the date time of day. There is effectiveness which can expect the date time of day, can make a message refreshable, and can be used as the multimedia message equipment which can process the multimedia message which specified the date time of day which becomes refreshable.

[0074] The destination assignment registration section which is made to input into a message person destination information on the message which according to invention according to claim 6 includes the class of external communication device of the transmission place of a message if a message person wishes at the time of message registration, and registers said destination information, Since it constituted so that it might have the destination message Management Department which directs transmission at said transmission place of the message into which said registered destination information was managed and said destination information was registered There is effectiveness which can use a multimedia message as the multimedia message equipment which can be transmitted directly by a message person's hope at a specific partner corresponding to the class of the external communication device.

[0075] Since it constituted according to invention according to claim 7 so that the message into which said destination information was registered may transmit when made the time which transmits a message input into a message person further and it became said time at the time of the input of destination information, the effectiveness which can carry out as the multimedia message equipment which can carry out transmission of the message to the specific partner of whom a message person expects to the time of hope of a user is.

CLAIMS

[Claim(s)]

[Claim 1] The message registration section which performs registration processing of the message data of each data kind which constitutes a message, The class of external communication device used as the message are recording section which stores the message data of each data kind registered, and the transmission place of a message is judged. An external communication device judging means to determine the communication link voice kind which determines whether the commo data kind which can process the external communication device is which data kind, and uses it for the communication link with the external communication device, The message playback section which picks out said determined commo data kind of message data from the message data of each data kind accumulated in said message are recording section corresponding to said message at the time of transmission of a message, Multimedia message equipment characterized by having a communications processing means to transmit said determined commo data kind which was taken out by said message playback section of message data to said external communication device with said determined communication link voice kind.

[Claim 2] An external communication device judging means to determine the communication link voice kind which judges the class of external communication device which serves as a transceiver partner of a message, determines whether the commo data kind which can process the external communication device is which data kind, and uses it for the communication link with the external communication device, The message registration section which performs registration processing of the message data of each data kind which constitutes the message of the message received by communication link, At the time of the message are recording section which stores the message data of each data kind registered, and transmission of a message From the message data of each data kind accumulated in said message are recording section corresponding to said message, at the time of the message playback section which takes out said determined commo data kind of message data, and transmission of a message Said determined commo data kind which was taken out by said message playback section of message data are transmitted to said external

communication device with said determined communication link voice kind. At the time of reception of a message Multimedia message equipment characterized by having a communications processing means by which said determined communication link voice kind receives message data from said external communication device.

[Claim 3] Multimedia message equipment according to claim 1 or 2 characterized by establishing voice, a still picture, and three data kinds of an alphabetic character as a data kind which constitutes a message.

[Claim 4] A data kind inputs audio message data from voice input means, such as a microphone, at the time of registration of the message by the direct control of equipment. The speech processing section in which a data kind outputs audio message data from voice output means, such as a loudspeaker, at the time of playback of the message by the direct control of equipment, A data kind inputs the message data of a still picture from still picture input means, such as a video camera, at the time of registration of the message by the direct control of equipment. The image-processing section in which a data kind outputs the message data of a still picture from still picture output means, such as a monitor, at the time of playback of the message by the direct control of equipment, A data kind inputs the message data of an alphabetic character from alphabetic character input means, such as a keyboard, at the time of registration of the message by the direct control of equipment. Multimedia message equipment according to claim 3 characterized by having the character-manipulation section in which a data kind outputs the message data of an alphabetic character from alphabetic character output means, such as a printer, at the time of playback of the message by the direct control of equipment.

[Claim 5] Multimedia message equipment given [of claim 1 carry out having had the date appointed Management Department which will make the message refreshable if a message person wishes at the time of message registration, make a message person input the date time of day which makes a message refreshable, the date assignment registration section registered as date time information and the date time information of the registered message manage and the registered date time of day will come as the description to the claims 4] in any 1 term.

[Claim 6] The destination assignment registration section which is made to input into a message person destination information on the message which includes the class of external communication device of the transmission place of a message if a message person wishes at the time of message registration, and registers said destination information, Multimedia message equipment given [of claim 1 to the claims 4 characterized by having the destination message Management Department which directs transmission at said transmission place of the message into which said registered destination information was managed and said destination information was registered] in any 1 term.

[Claim 7] Multimedia message equipment according to claim 6 characterized by transmitting the message into which said destination information was registered when the time which transmits a message was made to input into a message person further and it became said time at the time of the input of destination

information.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] It is the block diagram of the multimedia message equipment by the gestalt 1 of implementation of this invention.

[Drawing 2] It is front drawing showing an example of the message managed table used in the gestalt 1 of operation.

[Drawing 3] It is front drawing showing correspondence with the external communication device at the time of determining a communication link voice kind and a commo data kind in the external communication device judging section in the gestalt 1 of operation, and a communication link voice kind and a commo data kind.

[Drawing 4] It is the flow chart which shows the flow of processing of the multimedia message equipment by the gestalt 1 of implementation of this invention.

[Drawing 5] It is the flow chart which shows the flow of processing of message registration processing of the step ST 5 in drawing 4 .

[Drawing 6] It is the flow chart which shows the flow [communication device / of a step ST 2 / external] of processing of transceiver processing in drawing 4 .

[Drawing 7] It is front drawing showing the form in each part of the various message data in the multimedia message equipment by the gestalt 1 of operation.

[Drawing 8] It is the block diagram of the multimedia message equipment by the gestalt 2 of implementation of this invention.

[Drawing 9] It is front drawing showing an example of the message managed table used in the gestalt 2 of operation.

[Drawing 10] It is front drawing showing an example of a date time-of-day information management table when the message managed table of drawing 9 is used.

[Drawing 11] It is the flow chart which shows the flow of processing of the multimedia message equipment of the gestalt 2 of operation.

[Drawing 12] It is the flow chart which shows the flow of processing of registration of the date time information by the date assignment registration section 30 of the step ST 43 of drawing 11 .

[Drawing 13] It is the flow chart which shows the flow of processing of a check of the date time information of the step ST 41 of drawing 11 .

[Drawing 14] It is the block diagram of the multimedia message equipment by the gestalt 3 of implementation of this invention.

[Drawing 15] It is the flow chart which shows the flow of processing of the multimedia message equipment of the gestalt 3 of operation.

[Drawing 16] It is the flow chart which shows the flow of processing of destination assignment transmitting processing of the step ST 61 in drawing 15 .

[Drawing 17] It is front drawing showing an example of the destination control

table used in the gestalt 3 of operation.

[Drawing 18] It is the block diagram of the conventional multimedia message equipment shown in JP,6-62337,A.

[Drawing 19] It is the block diagram of the equipment which has the function of the conventional multimedia message equipment shown in JP,63-86655,A.

[Description of Notations]

1 Speech Processing Section, 2 Microphone (Voice Input Means), 3 Loudspeaker (Voice Output Means), 4 The image-processing section, 5 A video camera (still picture input means), 6 Monitor (still picture output means), 7 The character-manipulation section, 8 A keyboard (alphabetic character input means), 9 Printer (alphabetic character output means), 10 An external communication device, 11 Communications processing section (an external communication device judging means, communications processing means), 12 FAX / voice modem (an external communication device judging means, communications processing means), 13 The external communication device judging section (external communication device judging means), 14 The message registration section, 15 The message are recording section, 16 message playback section, 30 The date assignment registration section, 31 The date appointed Management Department, 40 The destination assignment registration section, 41 Destination message Management Department.

において通信音声種および通信データ種を決定する際の外部通信装置と、通信音声種および通信データ種との対応を示す表図である。

【図4】 この発明の実施の形態1によるマルチメディア伝言装置の処理の流れを示すフローチャートである。

【図5】 図4におけるステップST5の伝言登録処理の処理の流れを示すフローチャートである。

【図6】 図4におけるステップST2の外部通信装置との送受信処理の処理の流れを示すフローチャートである。

【図7】 実施の形態1によるマルチメディア伝言装置における各種伝言データの各部における型式を示す表図である。

【図8】 この発明の実施の形態2によるマルチメディア伝言装置の構成図である。

【図9】 実施の形態2において用いられる伝言管理テーブルの一例を示す表図である。

【図10】 図9の伝言管理テーブルが用いられているときの期日時刻情報管理テーブルの一例を示す表図である。

【図11】 実施の形態2のマルチメディア伝言装置の処理の流れを示すフローチャートである。

【図12】 図11のステップST43の期日指定登録部30による期日時刻情報の登録の処理の流れを示すフローチャートである。

【図13】 図11のステップST41の期日時刻情報の確認の処理の流れを示すフローチャートである。 *

*【図14】 この発明の実施の形態3によるマルチメディア伝言装置の構成図である。

【図15】 実施の形態3のマルチメディア伝言装置の処理の流れを示すフローチャートである。

【図16】 図15におけるステップST61の宛先指定送信処理の処理の流れを示すフローチャートである。

【図17】 実施の形態3において用いられる宛先管理テーブルの一例を示す表図である。

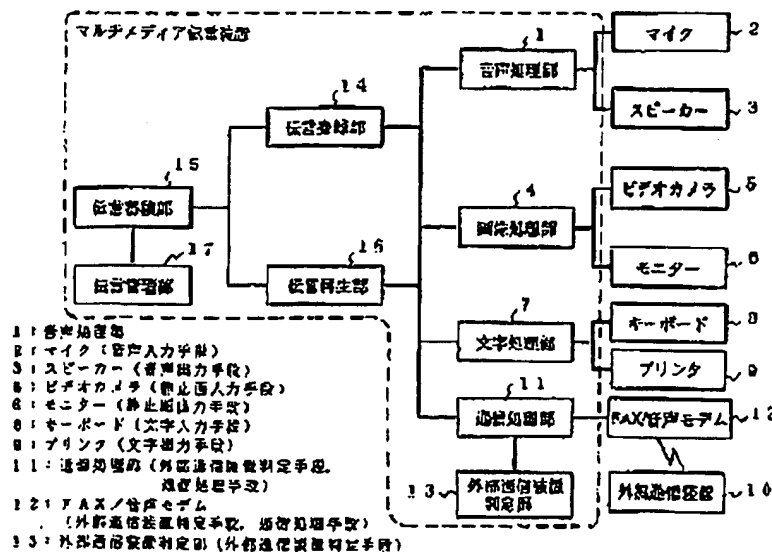
【図18】 特開平6-62337号公報に示された従来のマルチメディア伝言装置の構成図である。

【図19】 特開昭63-86655号公報に示された従来のマルチメディア伝言装置の機能を有する装置の構成図である。

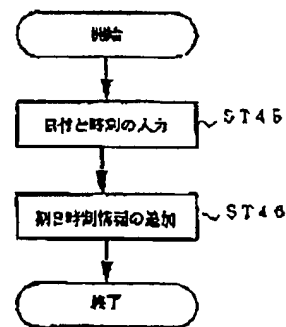
【符号の説明】

1 音声処理部、2 マイク（音声入力手段）、3 スピーカー（音声出力手段）、4 画像処理部、5 ビデオカメラ（静止画入力手段）、6 モニター（静止画出力手段）、7 文字処理部、8 キーボード（文字入力手段）、9 プリンタ（文字出力手段）、10 外部通信装置、11 通信処理部（外部通信装置判定手段、通信処理手段）、12 FAX/音声モデム（外部通信装置判定手段、通信処理手段）、13 外部通信装置判定部（外部通信装置判定手段）、14 伝言登録部、15 伝言着信部、16 伝言再生部、30 期日指定登録部、31 期日指定管理部、40 宛先指定登録部、41 宛先伝言管理部。

【図1】



【図12】



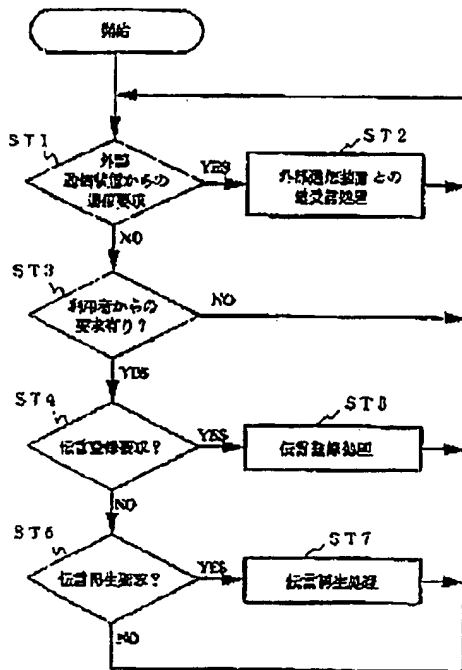
【図2】

伝言の識別番号	停止画	音声	文字	有効/無効
1	p0001. bmp	v0001. wav	s0001. str	有効
2	p0002. bmp		s0002. str	有効
3	p0003. bmp	v0002. wav		有効
4			s0003. str	有効
5		v0003. wav		有効
6	p0004. bmp		s0004. str	有効
.
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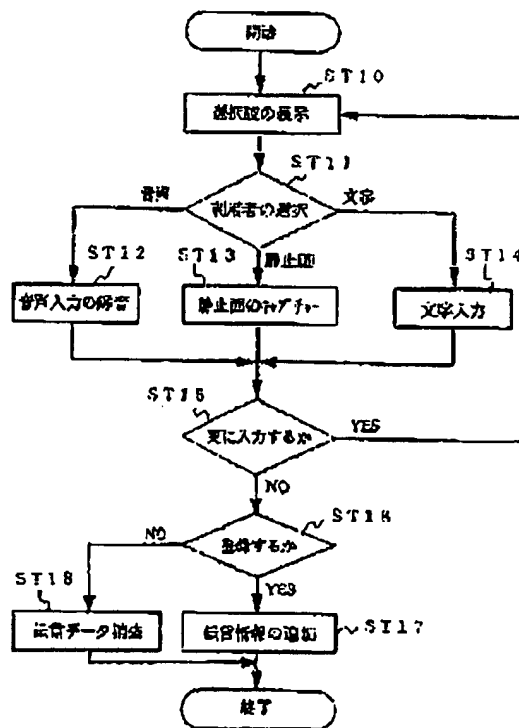
【図3】

外部通信装置	通信音声種	通信データ種
電話	音声	音声
ファックス	ファックス送話音	停止画と文字
パソコン	モデム送話音	音声と停止画と文字

【図4】



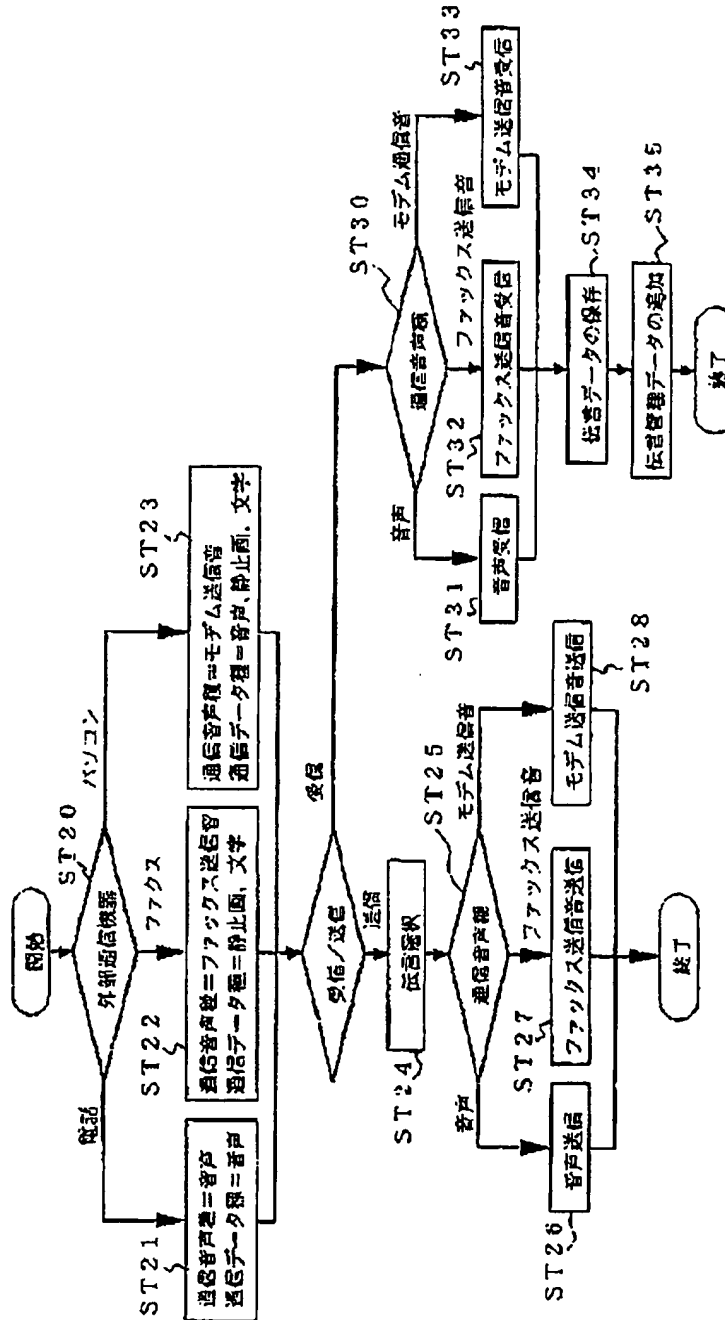
【図5】



【図10】

伝言の識別番号	日付	時刻
2	1996/2/20	20:00
4	1996/2/21	6:00
6	1996/2/24	14:00
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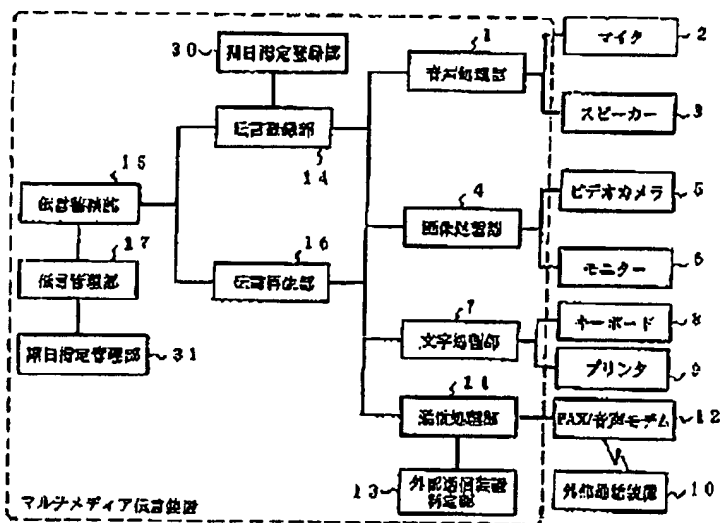
【図6】



【図7】

外部通信装置	通信データ種	装置番領域 ～装置識別部	通信処理部 ～FAX/音声モデム	FAX/音声モデム ～通信制御部(通信制御部)
電話	音声	音声データ (WAV)	音声を変換する デジタルデータ (FAX/音声モデム用)	音声
ファックス	停止図	停止図データ (BMP)	ファックスデータを デジタルデータ (FAX/音声モデム用)	ファックス送信部 (ファックスプロトコル)
	文字	文字データ (シフトJIS)	ファックスデータを デジタルデータ (FAX/音声モデム用)	ファックス送信部 (ファックスプロトコル)
パソコン	音声	音声データ (WAV)	デジタルデータ (FAX/音声モデム用)	モデム送信部 (モデムプロトコル)
	停止図	停止図データ (BMP)	デジタルデータ (FAX/音声モデム用)	モデム送信部 (モデムプロトコル)
	文字	文字データ (シフトJIS)	デジタルデータ (FAX/音声モデム用)	モデム送信部 (モデムプロトコル)

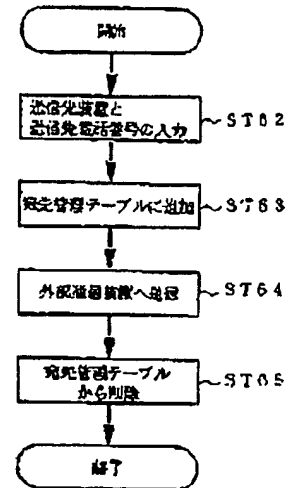
【図8】



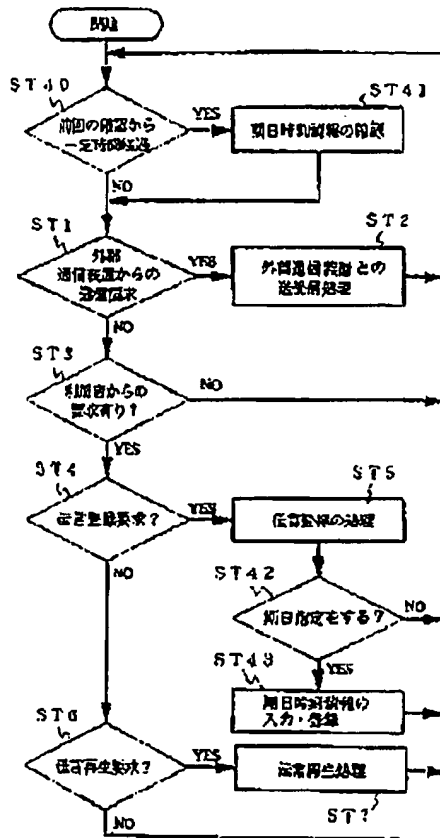
【図9】

伝送の識別番号	停止図	音声	文字	有効/無効
1	p0001. bmp	v0001. wav	s0001. str	有効
2	n0002. bmp		s0002. str	無効
3	p0003. bmp	v0002. wav		有効
4			s0003. str	無効
5		v0003. wav		有効
6	p0004. bmp		s0004. str	無効
.
.
.

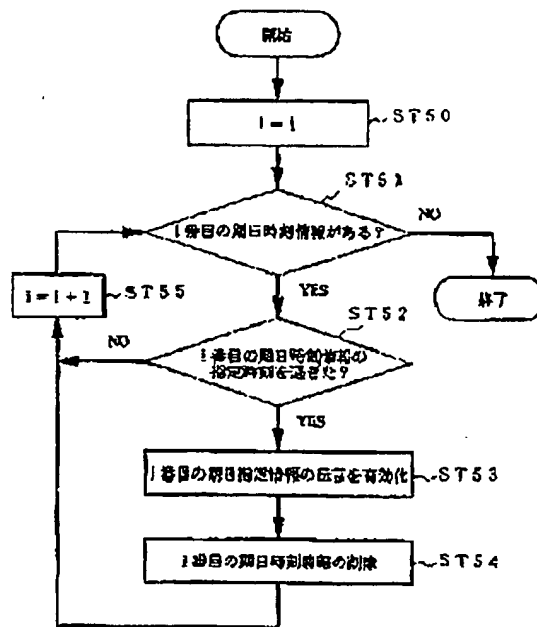
【図16】



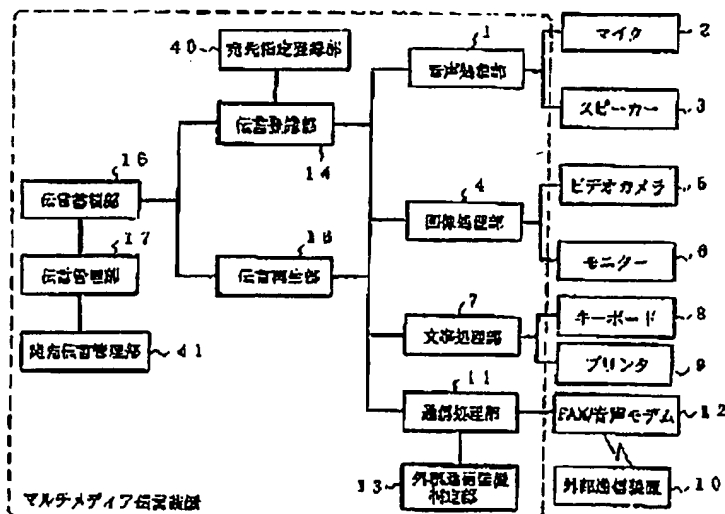
【図11】



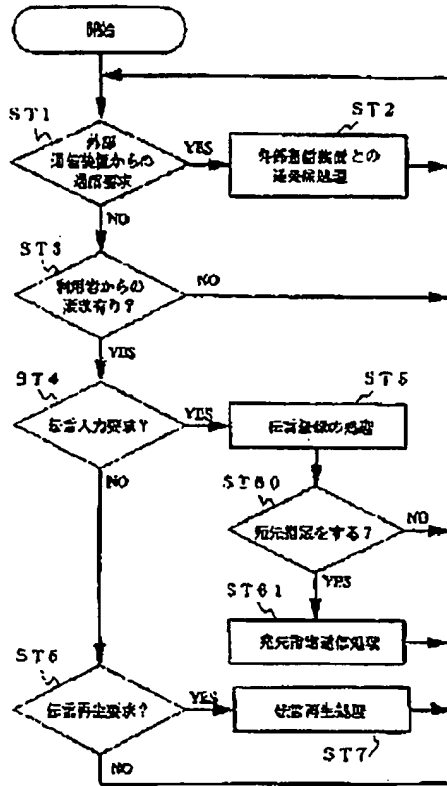
【図13】



【図14】



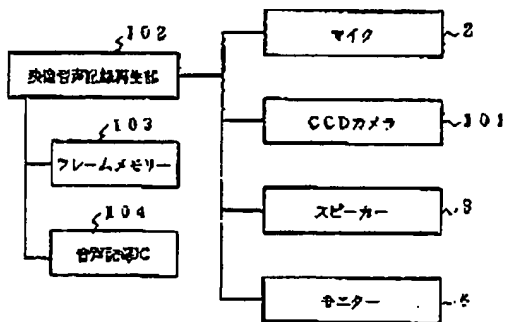
【図15】



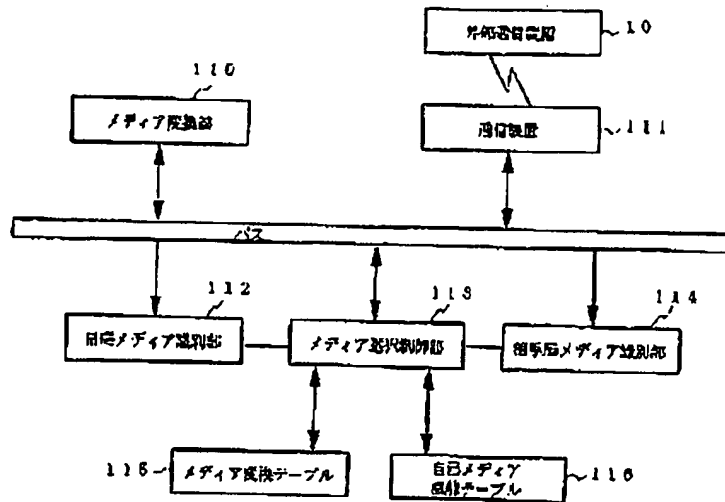
【図17】

伝言の識別番号	送信先装置	送信先電話番号	送信/受信
2	ファクシミリ	04xx-xx-xxxxxx	待機
5	電話	03-xxxx-xxxxxx	待機
6	パソコン	04xx-xxxx-xxxxxx	送信
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【図18】



【図19】



フロントページの続き

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